

RESULT 1  
US-09-523-656-37  
; Sequence 37, Application US/09523656  
; Patent No. 6458563  
; GENERAL INFORMATION:  
; APPLICANT: Lollar S., John  
; TITLE OF INVENTION: MODIFIED FACTOR VIII  
; FILE REFERENCE: 75-951  
; CURRENT APPLICATION NUMBER: US/09/523,656  
; CURRENT FILING DATE: 2000-03-10  
; EARLIER APPLICATION NUMBER: 09/037,601  
; EARLIER FILING DATE: 1998-03-10  
; EARLIER APPLICATION NUMBER: 08/670,707  
; EARLIER FILING DATE: 1996-06-26  
; NUMBER OF SEQ ID NOS: 38  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 37  
; LENGTH: 4404  
; TYPE: DNA  
; ORGANISM: Porcine  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (1)..(4401)  
US-09-523-656-37

Query Match 90.0%; Score 3962.6; DB 3; Length 4404;  
Best Local Similarity 93.8%; Pred. No. 0;  
Matches 4127; Conservative 0; Mismatches 274; Indels 0; Gaps 0;

Qy	Db
1 ATGCAGCTAGAGCTCCACCTGTCTTCTGTGTCCTTGCCACTCGGTTAGTGCC 60	1 ATGCAGCTAGAGCTCCACCTGTCTTCTGTGTCCTTGCCACTCGGTTAGTGCC 60
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121 CTCCGTGAGCTGCACGTGGACACCAGATTCTCTGTCACAGGCCAGGAGCTTCCGTG 180	121 CTCCGTGAGCTGCACGTGGACACCAGATTCTCTGTCACAGGCCAGGAGCTTCCGTG 180
181 GGCCCGTCAGTCTGTACA AAAAAGACTGTGTTCTGAGGTACCGATCAACTTTTACGC 240	181 GGCCCGTCAGTCTGTACA AAAAAGACTGTGTTCTGAGGTACCGATCAACTTTTACGC 240
241 GTGCCAGGCCAGGCCACCATGGATGGGCTGCTGGGCTTACCATCCAGGCTGAGGTT 300	241 GTGCCAGGCCAGGCCACCATGGATGGGCTGCTGGGCTTACCATCCAGGCTGAGGTT 300
301 TACGACACGGTGGCTGTACCCCTGAAGAACATGGCTTCTCATCCGTTAGTCTCACGCT 360	301 TACGACACGGTGGCTGTACCCCTGAAGAACATGGCTTCTCATCCGTTAGTCTCACGCT 360
361 GTCGGCGCTCTCTTGAAATCTCCGAAGGCCTGAATATGAGGATCACACCCAGCAA 420	361 GTCGGCGCTCTCTTGAAATCTCCGAAGGCCTGAATATGAGGATCACACCCAGCAA 420

Qy 421 AGGGAGAAGGAAGACGATAAACTCCTCCCGTAAAGCCAAA CCTACGTCTGGCAGGTC 480  
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Db 421 AGGGAGAAGGAAGACGATAAACTCCTCCCGTAAAGCCAAA CCTACGTCTGGCAGGTC 480  
  
Qy 481 CTGAAAGAAAAATGGTCAAACAGCCTCTGACCCACCATGCTTACCTACTCATACCTGTCT 540  
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Db 481 CTGAAAGAAAAATGGTCAAACAGCCTCTGACCCACCATGCTTACCTACTCATACCTGTCT 540  
  
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Db 601 GAAGGGAGTCTGACCAGAGAAAAGGACCCAGAACCTGCACGAATTGTACTACTTTGCT 660  
  
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Db 661 GTCTTGATGAAGGGAAAAGTTGGCACTCAGCAAGAAATGACTCCTGGACACGGGATG 720  
  
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Db 781 TCTCTGCCAGGTCTGATCGGATGTCATAAGAAATCAGTCTACTGGCACGTGATTGGATG 840  
  
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Db 3901 TTGATGGCTGTGATTTAAACAGTTGCAGCATGCCCTGGGAATGCAGAATAAGCGATA 3960  
  
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Db 4081 CGAGAGGAGTGCTGCAAGTGGCTGAGGTGGACCTGCAGAACAGGGTGAAGGTACAGGCATCACCAC 4140  
  
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Db 4201 CAGGACGGCCGCCGCTGGACCCCTGTTCTCAGGACGGCCACACGAAGGTTTCAGG 4260  
  
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Db 4381 TGTGAGGCACAGGATCTCTAC 4401

RESULT 2

US-08-670-707A-38

; Sequence 38, Application US/08670707A

; Patent No. 5859204

; GENERAL INFORMATION:

; APPLICANT: Lollar, John S.

; TITLE OF INVENTION: Hybrid Human/Animal Factor VIII

; NUMBER OF SEQUENCES: 40

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Greenlee, Winner and Sullivan, P.C.

; STREET: 5370 Manhattan Circle Suite 201

; CITY: Boulder

; STATE: Colorado

; COUNTRY: USA

; ZIP: 80303

; COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/670,707A  
FILING DATE: 26-JUN-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: WO PCT/US94/13200  
FILING DATE: 15-NOV-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/212,133  
FILING DATE: 11-MAR-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/864,004  
FILING DATE: 07-APR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Greenlee, Lorance L.  
REGISTRATION NUMBER: 27,894  
REFERENCE/DOCKET NUMBER: 75-95F  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 303/499-8080  
TELEFAX: 303/499-8089  
INFORMATION FOR SEQ ID NO: 38:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4334 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: not relevant  
MOLECULE TYPE: cDNA to mRNA  
HYPOTHETICAL: NO  
ORIGINAL SOURCE:  
INDIVIDUAL ISOLATE: Factor VIII lacking B domain  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3..4334  
US-08-670-707A-38

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Qy 1201 TGGGTACATTACATTGCTGCTGAAGAGGAGACTGGGACTATGCTCCCTAGTCCTCGCC 1260  
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Qy 1203 TGGGTGCACTACATCTCTGCAGAGGAGGAGACTGGGACTACGCCCGCGGTCCCAAGC 1262  
Db ||||||| |||||||  
Qy 1261 CCCGATGACAGAAGTTATAAAAGTCAATTGGACATGGCCCTCAGCGGATGGTAGG 1320  
Db ||||||| ||||||| ||||||| ||||||| ||||||| |||||||  
Qy 1263 CCCAGTACAGAAGTTATAAAAGTCTACTTGAACAGTGGTCTCAGCGAATTGGTAGG 1322  
Db ||||||| |||||||  
Qy 1321 AAGTACAAAAAAAGTCCGATTATGGCATACACAGATGAAACCTTAAGACGCGTGAAGCT 1380  
Db ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||  
Qy 1323 AAATACAAAAAAAGCTCGATTGCTGCTTACACGGATGTAACATTAAAGACTCGTAAAGCT 1382  
Db ||||||| |||||||  
Qy 1381 ATTCAAGCATGATCAGGAATCTGGGACCTTACTTATGGGAAGTGGAGACACACTG 1440  
Db ||||||| |||||||  
Qy 1383 ATTCCGTATGAATCAGGAATCTGGGACCTTACTTATGGAGAAGTGGAGACACACT 1442  
Db ||||||| |||||||  
Qy 1441 TTGATTATTTAAGAACATCAAGCAAGCAGACCATATAACATCTACCCCTACCGAACACT 1500  
Db ||||||| ||||||| ||||||| ||||||| |||||||  
Qy 1443 TTGATTATTTAAGAACATCAAGCAGACCATATAACATCTACCCCTATGGAATCACT 1502  
Db ||||||| |||||||  
Qy 1501 GATGTCCTGCTTGTATCAAGGAGATTACCAAAGGTGAAAATTTGAGGATT 1560  
Db ||||||| ||||||| ||||||| ||||||| |||||||  
Qy 1503 GATGTCAGCGCTTGCACCCAGGGAGACTCTAAAAGGTGGAAACATTGAAAGACATG 1562  
Db ||||||| |||||||  
Qy 1561 CCAATTCTGCCAGGAGAACATTCAAAATAATGGACAGTGACTGTAGAACATGGCCA 1620  
Db ||||||| ||||||| ||||||| ||||||| |||||||  
Qy 1563 CCAATTCTGCCAGGAGAACATTCAAGTATAATGGACAGTGACTGTAGAACATGGCCA 1622  
Db ||||||| |||||||  
Qy 1621 ACTAAATCAGATCCGGGTGCGTGCACCGCTATTACTCTAGTTCTGTTAATATGGAGA 1680  
Db ||||||| ||||||| ||||||| ||||||| ||||||| |||||||  
Qy 1623 ACCAAGTCGATCTCGGTGCCCTGACCCGCTACTACTCGAGCTCCATTATCTAGAGAAA 1682  
Db ||||||| ||||||| |||||||  
Qy 1681 GATCTAGCTTCAGGACTCATGGCCCTCTCTCATCTGCTACAAAGAACCTGTAGATCAA 1740  
Db ||||||| ||||||| ||||||| |||||||  
Qy 1683 GATCTGGCTCGGGACTCATGGCCCTCTCTCATCTGCTACAAAGAACCTGTAGACCAA 1742  
Db ||||||| |||||||  
Qy 1741 AGAGGAACACAGATAATGTCAGACAAGAGGAATGTCATCTGTTCTGTTATGATGAG 1800  
Db ||||||| ||||||| |||||||  
Qy 1743 AGAGGAACACAGATGATGTCAGACAAGAGAACGTCATCTGTTCTGTTATGATGAG 1802  
Db ||||||| |||||||  
Qy 1801 AACCGAAGCTGGTACCTCACAGAGAACATACACGCTTCTCCCAATCCAGCTGGAGTG 1860  
Db ||||||| ||||||| ||||||| |||||||  
Qy 1803 AATCAAAAGCTGGTACCTCCAGAGAACATACACGCTTCTCCCCAATCGGATGGATTA 1862  
Db ||||||| |||||||  
Qy 1861 CAGCTTGAGGATCCAGAGTTCAGCAGCTCCACATCATGCACAGCATCAATGGCTATGTT 1920  
Db ||||||| ||||||| ||||||| |||||||  
Qy 1863 CAGCCCCAGGATCCAGAGTTCAGCAGCTAACATCATGCACAGCATCAATGGCTATGTT 1922

Qy	1921	TTTGATAGTTGCAGTTGCACTGGTGGCATACTGGTACATTCTAAGC	1980
Db	1923	TTTGATAGTTGCAGCTGCGGTTGGTGCAGGGTGGCATACTGGTACATTCTAAGT	1982
Qy	1981	ATTGGAGCACAGACTGACTTCCTTCTGTCTTCTCTGGATATACCTTCAAACACAAA	2040
Db	1983	GTTGGAGCACAGACGGACTTCCTCTCCGCTTCTCTGGCTACACCTTCAAACACAAA	2042
Qy	2041	ATGGTCTATGAAGACACACTCACCCATTCCCATTCTCAGGAGAACTGTCTTATGTCG	2100
Db	2043	ATGGTCTATGAAGACACACTCACCCATTCCCATTCTCAGGAGAAACGGCTTATGTC	2102
Qy	2101	ATGGAAAAACCCAGGTCTATGGATTCTGGGGTGCCACAACCTAGACTTCGGAACAGAGGC	2160
Db	2103	ATGGAAAAACCCAGGTCTCTGGGTCTTAGGGTGCCACAACCTAGACTTGCAGGAACAGAGGG	2162
Qy	2161	ATGACGCCCTACTGAAGGGTTCTAGTTGTGACAAAGAACACTGGTGATTATACGAGGAC	2220
Db	2163	ATGACGCCCTACTGAAGGGTGTATAGTTGTGACAGGGACATTGGTGATTATACGAGAAC	2222
Qy	2221	AGTTATGAAGATAATTCAAGCATACTTGTGAGTAAAAACATGCCATTGAACTAGGAGC	2280
Db	2223	ACTTATGAAGATAATTCAAGGCCCTTGTGAGTGGAAAAGATGTGATTGAAACCCAGA---	2279
Qy	2281	TTGCCAGAATTCAAGACCCCTAGTGCAGCGCTCCAAAGCCTCCGGCTCGGACGG	2340
Db	2280	-----	2279
Qy	2341	CATCAGAGGGACATAAGCCCTTCTACTTTCAAGCCGGAGGAAGACAAAATGGACTATGAT	2400
Db	2280	-----GACATAAGCCCTTCTACTTTCAAGCCGGAGGAAGACAAAATGGACTATGAT	2330
Qy	2401	GATATCTTCTCAACTGAAAGGGAGAGAGATTTGACATTACGGTGAGGATGAAAAT	2460
Db	2331	GATATCTTCTCAACTGAAAGGAAGGGAGAGATTTGACATTACGGTGAGGATGAAAAT	2390
Qy	2461	CAGGACCCCTCGCAGCTTCAAGAAGAGAACCCGACACTATTTCATTGCTGCGGTGGAGCAG	2520
Db	2391	CAGGACCCCTCGCAGCTTCAAGAAGAGAACCCGACACTATTTCATTGCTGCGGTGGAGCAG	2450
Qy	2521	CTCTGGGATTACGGGATGAGCGAATCCCCCGGGCCTAAGAAACAGGGCTAGAACCGGA	2580
Db	2451	CTCTGGGATTACGGGATGAGCGAATCCCCCGGGCCTAAGAAACAGGGCTAGAACCGGA	2510
Qy	2581	GAGGTGCCCTCGGTTCAAGAAGGTGGTCTCCGGGAATTGCTGACGGCTCTTACCGCAG	2640
Db	2511	GAGGTGCCCTCGGTTCAAGAAGGTGGTCTCCGGGAATTGCTGACGGCTCTTACCGCAG	2570
Qy	2641	CCGTCGTACCGCGGGGAACTAACAAACACTTGGGCTTGGGACCCATACAGAGCG	2700
Db	2571	CCGTCGTACCGCGGGGAACTAACAAACACTTGGGCTTGGGACCCATACAGAGCG	2630
Qy	2701	GAAGTTGAAGACAACATCATGTAACCTCAAAACAGGGCTCTGCCCTATTCTTC	2760
Db	2631	GAAGTTGAAGACAACATCATGTAACCTCAAAACAGGGCTCTGCCCTATTCTTC	2690
Qy	2761	TACTCGAGCCTTATTCTTATCCGGATGATCAGGAGCAAGGGCAGAACCTCGACACAAC	2820

Db 2691 TACTCGAGCCTTATTCTTATCCGGATGATCAGGAGCAAGGGCAGAACCTCGACACAAC 2750  
Qy 2821 TTTCGTCAGCCAAATGAAACCGAACCTACTTTGAAAGTGCAGCATCACATGGCACCC 2880  
Db 2751 TTTCGTCAGCCAAATGAAACCGAACCTACTTTGAAAGTGCAGCATCACATGGCACCC 2810  
Qy 2881 ACAGAAGACGAGTTGACTGCAAAGCCTGGCCTACTTTCTGATGTTGACCTGGAAAAA 2940  
Db 2811 ACAGAAGACGAGTTGACTGCAAAGCCTGGCCTACTTTCTGATGTTGACCTGGAAAAA 2870  
Qy 2941 GATGTGCACTCAGGCCCTGATCGGCCCCCTCTGATCTGCCCGCGCAACACCCCTGAACGCT 3000  
Db 2871 GATGTGCACTCAGGCCCTGATCGGCCCCCTCTGATCTGCCCGCGCAACACCCCTGAACGCT 2930  
Qy 3001 GCTCACGGTAGACAAAGTGACCGTGCAGAATTGCTCTGTTTCACTATTTTGATGAG 3060  
Db 2931 GCTCACGGTAGACAAAGTGACCGTGCAGAATTGCTCTGTTTCACTATTTTGATGAG 2990  
Qy 3061 ACAAAAGCTGGTACTTCACTGAAAATGTGAAAGGAACACTGCCGGGCCCTGCCATCTG 3120  
Db 2991 ACAAAAGCTGGTACTTCACTGAAAATGTGAAAGGAACACTGCCGGGCCCTGCCACCTG 3050  
Qy 3121 CAGATGGAGGACCCCCTGAAAGAAAACATCGCTTCCATGCAATCAATGGCTATGTG 3180  
Db 3051 CAGATGGAGGACCCCCTGAAAGAAAACATCGCTTCCATGCAATCAATGGCTATGTG 3110  
Qy 3181 ATGGATACACTCCCTGGCTTAGTAATGGCTCAGAACCAAAGGATCCGATGGTATCTGCTC 3240  
Db 3111 ATGGATACACTCCCTGGCTTAGTAATGGCTCAGAACCAAAGGATCCGATGGTATCTGCTC 3170  
Qy 3241 AGCATGGGCAGCAATGAAAATATCCATTGATTGATTTAGCGGACACGTGTTAGTGA 3300  
Db 3171 AGCATGGGCAGCAATGAAAATATCCATTGATTGATTTAGCGGACACGTGTTAGTGA 3230  
Qy 3301 CGGAAAAGGAGGAGTATAAAATGGCGTGTACAATCTCTATCCGGGTGCTTTGAGACA 3360  
Db 3231 CGGAAAAGGAGGAGTATAAAATGGCGTGTACAATCTCTATCCGGGTGCTTTGAGACA 3290  
Qy 3361 GTGGAAATGCTACCGTCCAAGTTGGAATTGGCAATAGAACATGCTGATTGGCGAGCAC 3420  
Db 3291 GTGGAAATGCTACCGTCCAAGTTGGAATTGGCAATAGAACATGCTGATTGGCGAGCAC 3350  
Qy 3421 CTGCAAGCTGGGATGAGCACGACTTCTGGTGTACAGCAAGAAGTGTCAAGACTCCCTG 3480  
Db 3351 CTGCAAGCTGGGATGAGCACGACTTCTGGTGTACAGCAAGGAGTGTCAAGGCTCCACTG 3410  
Qy 3481 GGAATGGCTTCTGGACACATTAGAGATTTCAGATTACAGCTTCAGGACAATATGGACAG 3540  
Db 3411 GGAATGGCTTCTGGACACATTAGAGATTTCAGATCACAGCTTCAGGACAGTATGGACAG 3470  
Qy 3541 TGGGCCAAAGCTGGCAGACTTCATTATCCGGATCAATCAATGGCTGGAGCACCAAG 3600  
Db 3471 TGGGCCAAAGCTGGCAGACTTCATTATCCGGATCAATCAATGGCTGGAGCACCAAG 3530  
Qy 3601 GAGCCCTTTCTGGATCAAGGTGGATCTGTTGGCACCAATGATTATCACGGCATCAAG 3660

Db 3531 GATCCCCACTCTGGATCAAGGTGGATCTGTTGGACCAAATGATCATTCACGGCATCATG 3590  
Qy 3661 ACCCAGGGTGCCCGTCAGAAGTTCTCCAGCCTTACATCTCTCAGTTATCATCATGTAT 3'20  
Db 3591 ACCCAGGGTGCCCGTCAGAAGTTCTCCAGCCTTACATCTCCAGTTATCATCATGTAC 3650  
Qy 3721 AGTCTTGATGGGAAGAAGTGGCAGACTTATCGAGGAATTCCACTGGAACCTTAATGGTC 3780  
Db 3651 AGTCTTGACGGGAGGAACCTGGCAGAGTTACCGAGGAATTCCACGGCACCTTAATGGTC 3710  
Qy 3781 TTCTTTGGCAATGTGATTCTCATGGATAAAACACAATATTAAACCTCCAATTATT 3840  
Db 3711 TTCTTTGGCAATGTGAGGCATCTGGATAAACACAATATTAAACCTCCGATTGTG 3770  
Qy 3841 GCTCGATACATCCGTTGCACCCAACCTCATTTAGCATCGCAGCACTCTTCGATGGAG 3900  
Db 3771 GCTCGGTACATCGTTGCACCCAACACATTACAGCATCCGAGCACTCTTCGATGGAG 3830  
Qy 3901 TTGATGGGCTGTGATTTAAAGTAGTTGCAGCATGCCATTGGAAATGGAGAGTAAAGCAATA 3960  
Db 3831 TTGATGGGCTGTGATTTAAACAGTTGCAGCATGCCCTGGAAATGCGAGAATAAGCGATA 3890  
Qy 3961 TCAGATGACAGATTACTGCTTCTCATCCACTTTACCAAATAGTTGCCACCTGGTCTCC 4020  
Db 3891 TCAGACTCACAGATCACGGCTCCCTCCACCTAACAGAATATTTGCCACCTGGTCTCC 3950  
Qy 4021 TCAAAAAGCTGCACCTCACCTCAAGGGAGGAGTAATGCCCTGGAGACCTCAGGTGAATAAT 4080  
Db 3951 TCACAAAGCCCACCTCACCTCACGGGGGAGCAATGCCCTGGCACCCGGGTGAGCAGC 4010  
Qy 4081 CCAAAAAGGTGGCTGCAAGTGGACTTCCAGAGAAGACAATGAAAGTCACAGGAGTAACACT 4140  
Db 4011 GCAGAGGAGTGGCTGCAGGGTGGACCTGCAGAGAGCCTGGTAAGGTACAGGCATCACCC 4070  
Qy 4141 CAGGGAGTAAATCTCTTACACAGCATGTATGTGAAGGAGTTCTCATCTCAGCAGT 4200  
Db 4071 CAGGGCCTGAAAGTCCTGCTCAGCAGCATGTATGTGAAGGAGTTCTCTGTCAGTAGT 4130  
Qy 4201 CAAGATGGGCATCAGTGACTCTTTTTCAGAATGGCAAAGTAAAGGTTTCAGGG 4260  
Db 4131 CAGGACGGCCGCCCTGGACCCCTGTTCTCAGGACGCCACAGAAGGTTTCAGGGC 4190  
Qy 4261 AATCAAGACTCCTCACACCTGTGGTAACCTCTAGACCCACCGTTACTGACTCGCTAC 4320  
Db 4191 AATCAGGACTCCTCCACCCCGTGGTAACGCTCTGGACCCCCCGCTGTTCACCGCCTAC 4250  
Qy 4321 CTTCGAATTACCCCCAGAGTTGGGTGCACAGATTGCCCTGAGGATGGAGGTTCTGGGC 4380  
Db 4251 CTGAGGATCCACCCCCACAGAGCTGGCGCAGCACATGCCCTGAGGCTCAGGTTCTAGGA 4310  
Qy 4381 TGCGAGGCACAGGACCTCTAC 4401  
Db 4311 TGTGAGGCACAGGATCTCTAC 4331